

MEMS SENSOR FOR DETECTING  
STRESS CORROSION CRACKING

ABSTRACT OF THE DISCLOSURE

5       A sensor for measuring stress corrosion cracking and  
      methods of using the sensor. The sensor is a MEMS device  
      and has a cantilevered beam made from a material of  
      interest. The sensor has on-chip electrical connections  
      for measuring electrical characteristics that indicate  
      cracking of the beam. The sensor may further have on-  
      chip actuators for applying stress to the beam.